



A-665B.ST25.txt
SEQUENCE LISTING

#8

<110> KOSTENUIK, PAUL
LIU, CHUAN-FA
LACEY, DAVID LEE

<120> MODULATORS OF RECEPTORS FOR PARATHYROID HORMONE AND PARATHYROID
HORMONE-RELATED PROTEIN

<130> A-665B

<140> 09/843,221

<141> 2001-04-26

<150> 60/266,673

<151> 2001-02-06

<150> 60/214,860

<151> 2000-06-28

<150> 60/200,053

<151> 2000-04-27

<160> 170

<170> PatentIn version 3.1

<210> 1

<211> 684

<212> DNA

<213> Homo sapiens

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48

Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu

1

5

10

15

ggg gga ccg tca gtc ttc ctc ttc ccc cca aaa ccc aag gac acc ctc

96

Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu

20

25

30

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atg atc tcc cgg acc cct gag gtc aca tgc gtg gtg gtg gac gtg agc 44	1
Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser	
35 40 45	
cac gaa gac cct gag gtc aag ttc aac tgg tac gtg gac ggc gtg gag 92	1
His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu	
50 55 60	
gtg cat aat gcc aag aca aag ccg cgg gag gag cag tac aac agc acg 40	2
Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr	
65 70 75 80	
tac cgt gtg gtc agc gtc ctc acc gtc ctg cac cag gac tgg ctg aat 88	2
Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn	
85 90 95	
ggc aag gag tac aag tgc aag gtc tcc aac aaa gcc ctc cca gcc ccc 36	3
Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro	
100 105 110	
atc gag aaa acc atc tcc aaa gcc aaa ggg cag ccc cga gaa cca cag 84	3
Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln	
115 120 125	
gtg tac acc ctg ccc cca tcc cgg gat gag ctg acc aag aac cag gtc 32	4
Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val	
130 135 140	

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agc ctg acc tgc ctg gtc aaa ggc ttc tat ccc agc gac atc gcc gtg 4
80

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val

145 150 155 160

gag tgg gag agc aat ggg cag ccg gag aac aac tac aag acc acg cct 5
28

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro

165 170 175

ccc gtg ctg gac tcc gac ggc tcc ttc ttc ctc tac agc aag ctc acc 5
76

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr

180 185 190

gtg gac aag agc agg tgg cag cag ggg aac gtc ttc tca tgc tcc gtg 6
24

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val

195 200 205

atg cat gag gct ctg cac aac cac tac acg cag aag agc ctc tcc ctg 6
72

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu

210 215 220

tct ccg ggt aaa 6
84

Ser Pro Gly Lys

225

<210> 2
<211> 228
<212> PRT
<213> Homo sapiens

<400> 2

Met Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu

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1		5							10					15		
Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	
			20					25					30			
Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	
		35					40					45				
His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	
	50					55					60					
Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	
65					70					75					80	
Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	
				85					90					95		
Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	
			100					105					110			
Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	
		115					120					125				
Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	
	130					135					140					
Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	
145					150					155					160	
Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	
				165					170				175			
Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	
			180					185					190			
Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	
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Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 210 215 220

Ser Pro Gly Lys
 225

<210> 3
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<220>
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<220>
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 o
 r Nle most preferred)

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 <222> (3)..(3)
 <223> X10 is an amino acid residue (an acidic or hydrophilic residue
 pr
 eferred, N or D most preferred)

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> X11 is an amino acid residue (nonfunctional or basic residue pr
 ef
 erred, L, R, or K most preferred)

<220>
 <221> misc_feature
 <222> (5)..(5)

<223> X12 is an amino acid residue (nonfunctional or aromatic residue
p referred, G, F, or W most preferred)

<220>

<221> misc_feature

<222> (7)..(7)

<223> X14 is an amino acid residue (basic or hydrophilic residue preferred,
er H or S most preferred)

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<221> misc_feature

<222> (8)..(8)

<223> X15 is an amino acid residue (nonfunctional residue preferred,
wi th L or I most preferred)

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<221> misc_feature

<222> (9)..(9)

<223> X16 is an amino acid residue (nonfunctional or hydrophilic residue
du e preferred, Q, N, S, or A most preferred)

<220>

<221> misc_feature

<222> (10)..(10)

<223> X17 is an amino acid residue (acidic, hydrophilic, or nonfunctional
on al residue preferred, S, D, or L most preferred)

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<222> (11)..(11)

<223> X18 is an amino acid residue (nonfunctional residue preferred,
, L, V or Nle most preferred)

<220>

<221> misc_feature

<222> (12)..(12)

<223> X19 is an amino acid residue (acidic or basic residue preferred,
, E or R most preferred)

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 <222> (14)..(14)
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 <222> (15)..(15)
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 <222> (16)..(16)
 <223> X23 is an aromatic or lipophilic residue (W or F preferred)

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 <222> (17)..(17)
 <223> X24 is a lipophilic residue (L preferred)

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 <222> (18)..(18)
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 <222> (19)..(19)
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 <222> (20)..(20)
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1 residue preferred, K or L most preferred)

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<222> (21)..(21)

<223> X28 is an amino acid residue (lipophilic or nonfunctional residue preferred, L or I most preferred)

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<400> 3

Xaa	His	Xaa	Xaa	Xaa	Lys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Arg	Xaa	Xaa	Xaa
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Xaa	Xaa	Xaa	Xaa	Xaa
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<212> PRT

<213> Artificial Sequence

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<223> PTH/PTHrP

<220>

<221> misc_feature

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<223> Optional attachment to J1J2J3J4J5J6, J2J3J4J5J6, J3J4J5J6

<220>

<221> misc_feature

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<223> J7 is an amino acid residue (nonfunctional or aromatic residue preferred, L or F most preferred)

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 <223> J8 is an amino acid residue (nonfunctional residue preferred, M
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 r Nle most preferred)

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 <222> (6)..(6)
 <223> J12 is an amino acid residue (nonfunctional or aromatic residue
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 <222> (10)..(10)
 <223> J16 is an amino acid residue (nonfunctional or hydrophilic resi
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 e preferred, N, S, or A most preferred)

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 <221> misc_feature
 <222> (12)..(12)
 <223> J18 is an amino acid residue (nonfunctional residue preferred,
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 <222> (13)..(13)
 <223> J19 is an acidic or basic residue (E or R preferred)

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 <221> misc_feature
 <222> (15)..(15)
 <223> J21 is an amino acid residue (nonfunctional residue preferred,
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 M, or Nle most preferred)

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 <222> (22)..(22)

<223> Optional attachment to J29, J29J30, J29J30J31, J29J30J31J32, J29J30J31J32J33, or J29J30J31J32J33J3

<400> 4

Xaa	Xaa	His	Asn	Leu	Xaa	Lys	His	Leu	Xaa	Ser	Xaa	Xaa	Arg	Xaa	Glu
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Trp	Leu	Arg	Lys	Lys	Leu
			20		

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 <223> Optional attachment to Y01020304050607, 01020304050607, 020304050607, 0304050607, 04050607, 050607, 0607, or 07

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 <223> 010 is an amino acid residue (acidic or hydrophilic residue preferred, N or D most preferred)

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 <222> (4)..(4)
 <223> 011 is an amino acid residue (basic or nonfunctional residue preferred, K or L most preferred)

<220>
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 <222> (5)..(5)
 <223> 012 is an amino acid residue (aromatic or nonfunctional residue

P
referred, G, F, or W most preferred)

<220>
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<222> (9)..(9)
<223> 015 is an amino acid residue (hydrophilic or nonfunctional resi
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e preferred, I or S most preferred)

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<223> 016 is an amino acid residue (hydrophilic residue preferred, Q
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N most preferred)

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<222> (16)..(16)
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F
or W most preferred)

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<222> (21)..(21)
<223> Optional attachment to 029, 029030, 029030031, 029030031032, 02
90
30031032033, 029030031032033034 , 029030031032033034035, or 029
03
0031032033034035036

<400> 5

Leu	His	Xaa	Xaa	Xaa	Lys	Ser	Ile	Xaa	Xaa	Leu	Arg	Arg	Arg	Phe	Xaa
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Leu His His Leu Ile
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<213> Artificial Sequence

<220>

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Gly Gly Gly Lys Gly Gly Gly Gly
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<210> 7

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred linker

<400> 7

Gly Gly Gly Asn Gly Ser Gly Gly
1 5

<210> 8

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred linker

<400> 8

Gly Gly Gly Cys Gly Gly Gly Gly
1 5

<210> 9

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred linker

<400> 9

Gly Pro Asn Gly Gly
1 5

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<210> 10
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 10

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
 1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
 20 25 30

Asn Phe Val Ala Leu Gly Ala Pro Leu Ala Pro Arg Asp Ala Gly Ser
 35 40 45

Gln Arg Pro Arg Lys Lys Glu Asp Asn Val Leu Val Glu Ser His Glu
 50 55 60

Lys Ser Leu Gly Glu Ala Asp Lys Ala Asp Val Asn Val Leu Thr Lys
 65 70 75 80

Ala Lys Ser Gln

<210> 11
 <211> 84
 <212> PRT
 <213> Rattus rattus

<400> 11

Ala Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Ala
 1 5 10 15

Ser Val Glu Arg Met Gln Trp Leu Arg Lys Lys Leu Gln Asp Val His
 20 25 30

Asn Phe Val Ser Leu Gly Val Gln Met Ala Ala Arg Glu Gly Ser Tyr
 35 40 45

A-665B.ST25.txt

Gln Arg Pro Thr Lys Lys Glu Asp Asn Val Leu Val Asp Gly Asn Ser
50 55 60

Lys Ser Leu Gly Glu Gly Asp Lys Ala Asp Val Asp Val Leu Val Lys
65 70 75 80

Ala Lys Ser Gln

<210> 12
<211> 78
<212> PRT
<213> Homo sapiens

<400> 12

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Glu
1 5 10 15

Trp Leu Arg Lys Lys Leu Gln Asp Val His Asn Phe Val Ala Leu Gly
20 25 30

Ala Pro Leu Ala Pro Arg Asp Ala Gly Ser Gln Arg Pro Arg Lys Lys
35 40 45

Glu Asp Asn Val Leu Val Glu Ser His Glu Lys Ser Leu Gly Glu Ala
50 55 60

Asp Lys Ala Asp Val Asn Val Leu Thr Lys Ala Lys Ser Gln
65 70 75

<210> 13
<211> 44
<212> PRT
<213> Homo sapiens

<400> 13

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

A-665B.ST25.txt

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
 20 25 30

Asn Phe Val Ala Leu Gly Ala Pro Leu Ala Pro Arg
 35 40

<210> 14
 <211> 38
 <212> PRT
 <213> Homo sapiens

<400> 14

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
 1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
 20 25 30

Asn Phe Val Ala Leu Gly
 35

<210> 15
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 15

Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn Ser
 1 5 10 15

Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His Asn
 20 25 30

Phe Val Ala Leu Gly
 35

<210> 16
 <211> 34
 <212> PRT
 <213> Homo sapiens

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<400> 16

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
20 25 30

Asn Phe

<210> 17

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 17

Ser Val Ser Glu Ile Gln Leu Met His Asn Arg Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
20 25 30

Asn Phe

<210> 18

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 18

Ser Val Ser Glu Ile Gln Leu Met His Asn Lys Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His

20

25

30

Asn Phe

<210> 19
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 <213> Artificial Sequence

<220>
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<400> 19

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
 1 5 10 15

Ser Met Arg Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
 20 25 30

Asn Phe

<210> 20
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTH

<400> 20

Tyr Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
 1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
 20 25 30

Asn Phe

A-665B.ST25.txt

<210> 21
 <211> 34
 <212> PRT
 <213> Artificial Sequence

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Ser	Val	Ser	Glu	Ile	Gln	Leu	Leu	His	Asn	Leu	Gly	Lys	His	Leu	Asn
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Ser	Leu	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His
			20					25					30		

Asn Tyr

<210> 22
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> bovine

<400> 22

Ala	Val	Ser	Glu	Ile	Gln	Phe	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ser
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His
			20					25					30		

Asn Phe

<210> 23
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 23

Ala	Val	Ser	Glu	Ile	Gln	Phe	Leu	His	Asn	Leu	Gly	Lys	His	Leu	Ser
1				5					10					15	

Ser	Leu	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His
			20					25					30		

Asn Tyr

<210> 24

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> porcine

<400> 24

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ser
1				5					10					15	

Ser	Leu	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His
			20					25					30		

Asn Phe

<210> 25

<211> 34

<212> PRT

<213> Rattus rattus

<400> 25

Ala	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ala
1				5					10					15	

Ser	Val	Glu	Arg	Met	Gln	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His
			20					25					30		

Asn Phe

<210> 26
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified rat PTH

<400> 26

Ala	Val	Ser	Glu	Ile	Gln	Leu	Leu	His	Asn	Leu	Gly	Lys	His	Leu	Ala
1				5					10					15	

Ser	Val	Glu	Arg	Leu	Gln	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His
			20					25					30		

Asn Tyr

<210> 27
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 <212> PRT
 <213> Homo sapiens

<400> 27

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
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Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val
			20					25					30	

<210> 28
 <211> 31
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<220>
 <223> modified human PTH

<400> 28

A-665B.ST25.txt

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Leu Leu Gln Asp Val
20 25 30

<210> 29
<211> 32
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<213> Artificial Sequence

<220>
<223> PTH

<400> 29

Ser Glu Ile Gln Leu Leu His Asn Leu Gly Lys His Leu Asn Ser Leu
1 5 10 15

Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His Asn Tyr
20 25 30

<210> 30
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> bovine

<400> 30

Ser Glu Ile Gln Phe Met His Asn Leu Gly Lys His Leu Ser Ser Met
1 5 10 15

Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His Asn Phe
20 25 30

<210> 31
<211> 32
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<220>

<223> modified bovine PTH

<400> 31

Ser	Glu	Ile	Gln	Phe	Leu	His	Asn	Leu	Gly	Lys	His	Leu	Ser	Ser	Leu
1				5					10					15	

Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His	Asn	Tyr
			20					25					30		

<210> 32

<211> 28

<212> PRT

<213> Homo sapiens

<400> 32

Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn	Ser	Met	Glu	Arg	Val	Glu
1				5					10					15	

Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His	Asn	Phe
			20					25			

<210> 33

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 33

Leu	Leu	His	Asn	Leu	Gly	Lys	His	Leu	Asn	Ser	Leu	Glu	Arg	Val	Glu
1				5					10					15	

Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His	Asn	Tyr
			20					25			

<210> 34

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

A-665B.ST25.txt

<223> bovine PTH

<400> 34

Phe	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ser	Ser	Met	Glu	Arg	Val	Glu
1				5					10					15	

Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His	Asn	Phe
			20					25			

<210> 35

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> modified bovine PTH

<400> 35

Phe	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ser	Ser	Met	Glu	Arg	Val	Glu
1				5					10					15	

Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His	Asn	Tyr
			20					25			

<210> 36

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> modified bovine PTH

<400> 36

Phe	Leu	His	Asn	Leu	Gly	Lys	His	Leu	Ser	Ser	Leu	Glu	Arg	Val	Glu
1				5					10					15	

Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His	Asn	Tyr
			20					25			

<210> 37

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> modified bovine PTH

<400> 37

Cys Asn Gly Arg Cys
1 5

<210> 38

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> modified bovine PTH

<400> 38

Phe Met His Asn Leu Lys His Leu Ser Ser Met Glu Arg Val Glu Trp
1 5 10 15

Leu Arg Lys Lys Leu Gln Asp Val His Asn Tyr
20 25

<210> 39

<211> 30

<212> PRT

<213> Homo sapiens

<400> 39

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 40

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

A-665B.ST25.txt

<400> 40

Ser Val Ser Glu Ile Gln Leu Met His Asn Arg Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 41

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 41

Ser Val Ser Glu Ile Gln Leu Met His Asn Lys Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 42

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 42

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Arg Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
20 25 30

<210> 43

<211> 30

<212> PRT

<213> Artificial Sequence

A-665B.ST25.txt

<220>

<223> modified human PTH

<400> 43

Tyr	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
			20					25					30

<210> 44

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 44

Ser	Val	Ser	Glu	Ile	Gln	Leu	Leu	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Leu	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
			20					25					30

<210> 45

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> bovine

<400> 45

Ala	Val	Ser	Glu	Ile	Gln	Phe	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ser
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
			20					25					30

<210> 46

A-665B.ST25.txt

<211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified bovine PTH

<400> 46

Ala	Val	Ser	Glu	Ile	Gln	Phe	Leu	His	Asn	Leu	Gly	Lys	His	Leu	Ser
1				5					10					15	

Ser	Leu	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
			20					25					30

<210> 47
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> porcine PTH

<400> 47

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ser
1				5					10					15	

Ser	Leu	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
			20					25					30

<210> 48
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> rat PTH

<400> 48

Ala	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ala
1				5					10					15	

Ser	Val	Glu	Arg	Met	Gln	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
			20					25					30

A-665B.ST25.txt

<210> 49
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified rat PTH

<400> 49

Ala	Val	Ser	Glu	Ile	Gln	Leu	Leu	His	Asn	Leu	Gly	Lys	His	Leu	Ala
1				5					10					15	

Ser	Val	Glu	Arg	Leu	Gln	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
		20					25					30	

<210> 50
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTH

<400> 50

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Leu	Leu	Gln	Asp
		20					25					30	

<210> 51
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 51

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln
		20					25					

A-665B.ST25.txt

<210> 52
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 52

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu
			20					25			

<210> 53
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified PTH

<400> 53

Ser	Glu	Ile	Gln	Leu	Leu	His	Asn	Leu	Gly	Lys	His	Leu	Asn	Ser	Leu
1				5					10					15	

Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
			20					25			

<210> 54
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> bovine

<400> 54

Ser	Glu	Ile	Gln	Phe	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ser	Ser	Met
1				5					10					15	

Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
			20					25			

A-665B.ST25.txt

<210> 55
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified bovine PTH

<400> 55

Ser Glu Ile Gln Phe Leu His Asn Leu Gly Lys His Leu Ser Ser Leu
 1 5 10 15

Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp
 20 25

<210> 56
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 56

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Glu
 1 5 10 15

Trp Leu Arg Lys Lys Leu Gln Asp
 20

<210> 57
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTH

<400> 57

Leu Leu His Asn Leu Gly Lys His Leu Asn Ser Leu Glu Arg Val Glu
 1 5 10 15

Trp Leu Arg Lys Lys Leu Gln Asp
 20

A-665B.ST25.txt

<210> 58
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> bovine

<400> 58

Phe	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ser	Ser	Met	Glu	Arg	Val	Glu
1				5					10					15	

Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
				20			

<210> 59
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified bovine PTH

<400> 59

Phe	Leu	His	Asn	Leu	Gly	Lys	His	Leu	Ser	Ser	Leu	Glu	Arg	Val	Glu
1				5					10					15	

Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
				20			

<210> 60
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified bovine PTH

<400> 60

Phe	Leu	His	Asn	Leu	Trp	Lys	His	Leu	Ser	Ser	Leu	Glu	Arg	Val	Glu
1				5					10					15	

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Trp Leu Arg Lys Lys Leu Gln Asp
20

<210> 61
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified bovine PTH

<220>
<221> misc_feature
<222> (7)..(7)
<223> D amino acid

<400> 61

Phe Met His Asn Leu Lys Trp His Leu Ser Ser Met Glu Arg Val Glu
1 5 10 15

Trp Leu Arg Lys Lys Leu Gln Asp
20

<210> 62
<211> 86
<212> PRT
<213> Homo sapiens

<400> 62

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

~~Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile His~~
~~20 25 30~~

Thr Ala Glu Ile Arg Ala Thr Ser Glu Val Ser Pro Asn Ser Lys Pro
35 40 45

Ser Pro Asn Thr Lys Asn His Pro Val Arg Phe Gly Ser Asp Asp Glu
50 55 60

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Gly Arg Tyr Leu Thr Gln Glu Thr Asn Lys Val Glu Thr Tyr Lys Glu
65 70 75 80

Gln Pro Leu Lys Thr Pro
85

<210> 63
<211> 34
<212> PRT
<213> Homo sapiens

<400> 63

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile His
20 25 30

Thr Ala

<210> 64
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 64

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile His
20 25 30

Thr Ala Glu Tyr
35

<210> 65

A-665B.ST25.txt

<211> 36
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 65

Ala	Val	Ser	Glu	Ile	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Phe	Trp	Leu	His	His	Leu	Ile	Ala	Glu	Ile	His
		20						25					30		

Thr	Ala	Glu	Tyr
		35	

<210> 66
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 66

Tyr	Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile
1				5					10					15	

Gln	Asp	Leu	Arg	Arg	Arg	Phe	Phe	Leu	His	His	Leu	Ile	Ala	Glu	Ile
			20					25					30		

His	Thr	Ala
		35

<210> 67
 <211> 33
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

A-665B.ST25.txt

<400> 67

Ala Val Ser Glu His Gln Leu Leu His Asn Leu Lys Ser Ile Gln Asp
1 5 10 15

Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile His Thr
20 25 30

Ala

<210> 68

<211> 28

<212> PRT

<213> Homo sapiens

<400> 68

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 69

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 69

Leu Leu His Asn Leu Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 70

<211> 28

<212> PRT

<213> Artificial Sequence

A-665B.ST25.txt

<220>

<223> modified PTHrP

<400> 70

Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Asn	Leu	Leu	Arg	Arg	Arg	Phe
1				5					10					15	

Phe	Leu	His	His	Leu	Ile	Ala	Glu	Ile	His	Thr	Ala
			20					25			

<210> 71

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<220>

<221> misc_feature

<222> (6)..(6)

<223> D amino acid

<400> 71

Leu	Leu	His	Asp	Leu	Trp	Lys	Ser	Ile	Gln	Asp	Leu	Arg	Arg	Arg	Phe
1				5					10					15	

Phe	Leu	His	His	Leu	Ile	Ala	Glu	Ile	His	Thr	Ala
			20					25			

<210> 72

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> modified PTHrP

<220>

<221> misc_feature

<222> (6)..(6)

<223> D amino acid

A-665B.ST25.txt

<400> 72

Leu Leu His Asn Leu Trp Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 73

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> modified PTHrP

<220>

<221> misc_feature

<222> (5)..(5)

<223> D amino acid

<400> 73

Leu His Asn Leu Trp Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe
1 5 10 15

Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 74

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> modified PTHrP

<220>

<221> misc_feature

<222> (5)..(5)

<223> D amino acid

<400> 74

A-665B.ST25.txt

Leu His Asn Leu Phe Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe
1 5 10 15

Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 75
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<220>
<221> misc_feature
<222> (6)..(6)
<223> D amino acid

<400> 75

Leu Leu His Asn Leu Trp Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu Ile His Thr Ala
20 25

<210> 76
<211> 30
<212> PRT
<213> Homo sapiens

<400> 76

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu
20 25 30

<210> 77
<211> 30
<212> PRT
<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 77

Ala	Val	Ser	Glu	Ile	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Phe	Trp	Leu	His	His	Leu	Ile	Ala	Glu
		20						25					30

<210> 78

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> human PTHrP with non-human N-terminal peptide

<400> 78

Tyr	Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile
1				5					10					15	

Gln	Asp	Leu	Arg	Arg	Arg	Phe	Phe	Leu	His	His	Leu	Ile	Ala	Glu
			20					25					30	

<210> 79

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<220>

<221> misc_feature

<222> (12)..(12)

<223> D amino acid

<400> 79

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asn	Leu	Phe	Lys	Ser	Ile	Gln
1				5					10					15	

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Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu
 20 25 30

<210> 80
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 80

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
 1 5 10 15

Phe Leu His His Leu Ile Ala Glu
 20

<210> 81
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 81

Leu Leu His Asn Leu Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
 1 5 10 15

Phe Leu His His Leu Ile Ala Glu
 20

<210> 82
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified PTHrP

<400> 82

Leu Leu His Asp Lys Gly Lys Ser Ile Asn Leu Leu Arg Arg Arg Phe
 1 5 10 15

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Phe Leu His His Leu Ile Ala Glu
20

<210> 83
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 83

Leu Leu His Asp Leu Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe
1 5 10 15

Leu His His Leu Ile Ala Glu
20

<210> 84
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> modified PTHrP

<400> 84

Leu Leu His Asn Leu Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe
1 5 10 15

Leu His His Leu Ile Ala Glu
20

<210> 85
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> modified PTHrP

<220>
<221> misc_feature

A-665B.ST25.txt

<222> (5)..(5)
<223> D amino acid

<400> 85

Leu	His	Asn	Leu	Trp	Lys	Ser	Ile	Gln	Asp	Leu	Arg	Arg	Arg	Phe	Phe
1				5					10					15	

Leu	His	His	Leu	Ile	Ala	Glu
			20			

<210> 86
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> modified PTHrP

<220>
<221> misc_feature
<222> (5)..(5)
<223> D amino acid

<400> 86

Leu	His	Asn	Leu	Phe	Lys	Ser	Ile	Gln	Asp	Leu	Arg	Arg	Arg	Phe	Phe
1				5					10					15	

Leu	His	His	Leu	Ile	Ala	Glu
			20			

<210> 87
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<220>
<221> misc_feature
<222> (6)..(6)
<223> D amino acid

A-665B.ST25.txt

<400> 87

Leu Leu His Asn Leu Trp Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe
1 5 10 15

Phe Leu His His Leu Ile Ala Glu
20

<210> 88

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 88

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Asn Phe

<210> 89

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 89

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Leu Leu Glu Lys Leu Leu Lys Lys Leu His
20 25 30

A-665B.ST25.txt

Asn Phe

<210> 90
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTH

<400> 90

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Ala	Leu	Ala	Glu	Ala	Leu	Ala	Glu	Ala	Leu	His
			20					25					30		

Asn Phe

<210> 91
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTH

<400> 91

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Ser	Leu	Leu	Ser	Ser	Leu	Leu	Ser	Ser	Leu	His
			20					25					30		

Asn Phe

<210> 92
 <211> 34
 <212> PRT

A-665B.ST25.txt

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 92

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu His
20 25 30

Asn Phe

<210> 93

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 93

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Glu Lys Leu His Asn Phe
20 25

<210> 94

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 94

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Glu
1 5 10 15

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Leu Leu Glu Lys Leu Leu Lys Lys Leu His Asn Phe
20 25

<210> 95
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 95

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ala
1 5 10 15

Leu Ala Glu Ala Leu Ala Glu Ala Leu His Asn Phe
20 25

<210> 96
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 96

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ser
1 5 10 15

Leu Leu Ser Ser Leu Leu Ser Ser Leu His Asn Phe
20 25

<210> 97
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 97

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ala

1 5 10 15

Phe Tyr Asp Lys Val Ala Glu Lys Leu His Asn Phe
20 25

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<210> 98
<211> 34
<212> PRT
<213> Artificial Sequence
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<220>
<223> modified human PTHrP

<400> 98

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Thr Ala

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<210> 99
<211> 34
<212> PRT
<213> Artificial Sequence
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<220>
<223> modified human PTHrP

<400> 99

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Lys Leu Leu Lys Lys Leu His
20 25 30

Thr Ala

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<210> 100
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 100

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Ala	Leu	Ala	Glu	Ala	Leu	Ala	Glu	Ala	Leu	His
			20					25					30		

Thr Ala

<210> 101
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 101

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Ser	Leu	Leu	Ser	Ser	Leu	Leu	Ser	Ser	Leu	His
			20					25					30		

Thr Ala

<210> 102
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

A-665B.ST25.txt

<400> 102

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu His
20 25 30

Thr Ala

<210> 103

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 103

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Glu Lys Leu His Thr Ala
20 25

<210> 104

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 104

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Lys Lys Leu His Thr Ala
20 25

A-665B.ST25.txt

<210> 105
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 105

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ala
 1 5 10 15

Leu Ala Glu Ala Leu Ala Glu Ala Leu His Thr Ala
 20 25

<210> 106
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 106

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ser
 1 5 10 15

Leu Leu Ser Ser Leu Leu Ser Ser Leu His Thr Ala
 20 25

<210> 107
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 107

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ala
 1 5 10 15

Phe Tyr Asp Lys Val Ala Glu Lys Leu His Thr Ala

<210> 108
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 108

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Arg	Lys	Leu	His
			20					25					30		

Thr Ala

<210> 109
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 109

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Glu	Lys	Leu	His
			20					25					30		

Thr Ser

<210> 110
 <211> 37
 <212> PRT
 <213> Artificial Sequence

A-665B.ST25.txt

<220>

<223> modified human PTHrP

<400> 110

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Glu	Lys	Leu	His
			20					25					30		

Thr	Ala	Gly	Arg	Arg
		35		

<210> 111

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 111

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Glu	Lys	Leu	Lys
			20					25					30		

Glu Leu

<210> 112

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 112

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

A-665B.ST25.txt

1	5	10	15
Asp	Leu	Ala	Arg
	Arg	Glu	Leu
	Leu	Glu	Lys
	Leu	Leu	Glu
	Lys	Leu	His
	20	25	30

Thr Ala

<210> 113
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 113

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Ala	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Glu	Lys	Leu	His
				20				25					30		

Thr Ala

<210> 114
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 114

Ala	Val	Ser	Glu	Ala	Gln	Leu	Leu	His	Asp	Leu	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Glu	Lys	Leu	His
				20				25					30		

A-665B.ST25.txt

Ala Leu

<210> 115
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 115

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Glu Arg Leu His
20 25 30

Thr Ala

<210> 116
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 116

Ala Val Ser Glu His Gln Leu Leu His Asp Arg Gly Arg Ser Ile Gln
1 5 10 15

Asp Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Glu Arg Leu His Thr
20 25 30

Ala

<210> 117
<211> 34
<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 117

Ala Val Ser Glu His Gln Leu Leu His Asp Arg Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Lys Arg Leu His
20 25 30

Thr Ala

<210> 118

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 118

Ala Val Ser Glu His Gln Leu Leu His Asp Arg Gly Arg Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Arg Leu Leu Lys Arg Leu His
20 25 30

Thr Ala

<210> 119

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 119

A-665B.ST25.txt

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Ala Leu Ala Glu Ala Leu Ala Glu Ala Leu His
20 25 30

Thr Ala

<210> 120
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 120

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Ser Leu Leu Ser Ser Leu Leu Ser Ser Leu His
20 25 30

Thr Ala

<210> 121
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 121

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Ala Phe Tyr Asp Lys Val Ala Glu Lys Leu His
20 25 30

A-665B.ST25.txt

Thr Ala

<210> 122
 <211> 34
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> modified human PTHrP
 <400> 122

Ala	Val	Ser	Glu	Ile	Gln	Phe	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ser
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Glu	Lys	Leu	His
			20					25					30		

Asn Tyr

<210> 123
 <211> 34
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> modified human PTHrP
 <400> 123

Ala	Val	Ser	Glu	Ile	Gln	Phe	Met	His	Asn	Leu	Gly	Lys	His	Leu	Ser
1				5					10					15	

Ser	Met	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Glu	Lys	Leu	His
			20					25					30		

Asn Tyr

<210> 124
 <211> 30

A-665B.ST25.txt

<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 124

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Glu	Lys
			20					25					30

<210> 125
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 125

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Lys	Lys
			20					25					30

<210> 126
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 126

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Ala	Leu	Ala	Glu	Ala	Leu	Ala	Glu	Ala
			20					25					30

A-665B.ST25.txt

<210> 127
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTH

<400> 127

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Ser	Leu	Leu	Ser	Ser	Leu	Leu	Ser	Ser
			20					25					30

<210> 128
 <211> 34
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTH

<400> 128

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Ala	Phe	Tyr	Asp	Lys	Val	Ala	Glu	Lys	Leu	His
			20					25					30		

Asn Phe

<210> 129
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTH

<400> 129

A-665B.ST25.txt

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Glu Lys
20

<210> 130
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 130

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Glu
1 5 10 15

Leu Leu Glu Lys Leu Leu Lys Lys
20

<210> 131
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

<400> 131

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ala
1 5 10 15

Leu Ala Glu Ala Leu Ala Glu Ala
20

<210> 132
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTH

A-665B.ST25.txt

<400> 132

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ser
1 5 10 15

Leu Leu Ser Ser Leu Leu Ser Ser
20

<210> 133

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTH

<400> 133

Leu Met His Asn Leu Gly Lys His Leu Asn Ser Met Glu Arg Val Ala
1 5 10 15

Phe Tyr Asp Lys Val Ala Glu Lys
20

<210> 134

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 134

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 135

<211> 30

<212> PRT

<213> Artificial Sequence

A-665B.ST25.txt

<220>

<223> modified human PTHrP

<400> 135

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Lys	Lys
			20					25					30

<210> 136

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 136

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Ala	Leu	Ala	Glu	Ala	Leu	Ala	Glu	Ala
			20					25					30

<210> 137

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 137

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Ser	Leu	Leu	Ser	Ser	Leu	Leu	Ser	Ser
			20					25					30

<210> 138

A-665B.ST25.txt

<211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 138

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
 1 5 10 15

Asp Leu Arg Arg Arg Ala Phe Tyr Asp Lys Val Ala Glu Lys
 20 25 30

<210> 139
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 139

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Glu
 1 5 10 15

Leu Leu Glu Lys Leu Leu Glu Lys
 20

<210> 140
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 140

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Glu
 1 5 10 15

Leu Leu Glu Lys Leu Leu Lys Lys
 20

<210> 141
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 141

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ala
 1 5 10 15

Leu Ala Glu Ala Leu Ala Glu Ala
 20

<210> 142
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 142

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ser
 1 5 10 15

Leu Leu Ser Ser Leu Leu Ser Ser
 20

<210> 143
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 143

Leu Leu His Asp Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Ala
 1 5 10 15

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Phe Tyr Asp Lys Val Ala Glu Lys
20

<210> 144
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 144

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Arg	Lys
			20					25					30

<210> 145
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 145

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Glu	Lys
			20					25					30

<210> 146
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 146

A-665B.ST25.txt

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys Leu His
20 25 30

Thr

<210> 147
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 147

Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
1 5 10 15

Asp Leu Arg Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 148
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> modified human PTHrP

<400> 148

~~Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln~~
~~1 5 10 15~~

Asp Leu Ala Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys
20 25 30

<210> 149
<211> 30
<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 149

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Ala	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Glu	Lys
			20					25					30

<210> 150

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 150

Ala	Val	Ser	Glu	Ala	Gln	Leu	Leu	His	Asp	Leu	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Lys	Leu	Leu	Glu	Lys
			20					25					30

<210> 151

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> modified human PTHrP

<400> 151

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Arg	Leu	Leu	Glu	Arg
			20					25					30

A-665B.ST25.txt

<210> 152
 <211> 29
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 152

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Arg	Gly	Arg	Ser	Ile	Gln
1				5					10					15	

Asp	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Arg	Leu	Leu	Glu	Arg
				20				25				

<210> 153
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 153

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Arg	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Arg	Leu	Leu	Lys	Arg
					20			25				30	

<210> 154
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 154

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Arg	Gly	Arg	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Glu	Leu	Leu	Glu	Arg	Leu	Leu	Lys	Arg
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

20

25

30

<210> 155
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 155

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Ala	Leu	Ala	Glu	Ala	Leu	Ala	Glu	Ala
		20						25					30

<210> 156
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 156

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

Asp	Leu	Arg	Arg	Arg	Ser	Leu	Leu	Ser	Ser	Leu	Leu	Ser	Ser
		20						25					30

<210> 157
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 157

Ala	Val	Ser	Glu	His	Gln	Leu	Leu	His	Asp	Lys	Gly	Lys	Ser	Ile	Gln
1				5					10					15	

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Asp Leu Arg Arg Arg Ala Phe Tyr Asp Lys Val Ala Glu Lys
 20 25 30

<210> 158
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 158

Ala Val Ser Glu Ile Gln Phe Met His Asn Leu Gly Lys His Leu Ser
 1 5 10 15

Ser Met Glu Arg Val Glu Leu Leu Glu Lys Leu Leu Glu Lys
 20 25 30

<210> 159
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> modified human PTHrP

<400> 159

Ala Val Ser Glu Ile Gln Phe Met His Asn Leu Gly Lys His Leu Ser
 1 5 10 15

Ser Met Arg Arg Arg Glu Leu Leu Glu Lys Leu Leu Glu Lys
 20 25 30

<210> 160
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> TIP39

<400> 160

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Ser Leu Ala Leu Ala Asp Asp Ala Ala Phe Arg Glu Arg Ala Arg Leu
1 5 10 15

Leu Ala Ala Leu Glu Arg Arg His Trp Leu Asn Ser Tyr Met His Lys
20 25 30

Leu Leu Val Leu Asp Ala Pro
35

<210> 161

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred embodiments - PTH

<220>

<221> misc_feature

<222> (34)..(34)

<223> Optional linker and Fc domain attached at the C-terminus

<400> 161

Ser Val Ser Glu Ile Gln Leu Met His Asn Leu Gly Lys His Leu Asn
1 5 10 15

Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
20 25 30

Asn Phe

<210> 162

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred embodiments - PTH

<220>

<221> misc_feature

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<222> (34)..(34)

<223> Optional linker and Fc domain attached at the C-terminus

<400> 162

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Arg	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His
			20					25					30		

Asn Phe

<210> 163

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred embodiments - PTH

<220>

<221> misc_feature

<222> (34)..(34)

<223> Optional linker and Fc domain attached at the C-terminus

<400> 163

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Lys	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His
			20					25					30		

Asn Phe

<210> 164

<211> 34

<212> PRT

<213> Artificial Sequence

A-665B.ST25.txt

<220>

<223> Preferred embodiments - PTH

<220>

<221> misc_feature

<222> (34)..(34)

<223> Optional linker and Fc domain attached at the C-terminus

<400> 164

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Arg	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val	His
			20					25					30		

Asn Phe

<210> 165

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred embodiments - PTH

<220>

<221> misc_feature

<222> (31)..(31)

<223> Optional linker and Fc domain attached at the C-terminus

<400> 165

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp	Val
			20					25					30	

<210> 166

<211> 30

<212> PRT

<213> Artificial Sequence

A-665B.ST25.txt

<220>

<223> Preferred embodiments - PTH

<220>

<221> misc_feature

<222> (30)..(30)

<223> Optional linker and Fc domain attached at the C-terminus

<400> 166

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln	Asp
			20					25					30

<210> 167

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred embodiments - PTH

<220>

<221> misc_feature

<222> (1)..(1)

<223> Fc domain attached at the N-terminus through optional linker

<400> 167

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu	Gln
			20					25				

<210> 168

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Preferred embodiments - PTH

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> Fc domain attached at the N-terminus through optional linker

<400> 168

Ser	Val	Ser	Glu	Ile	Gln	Leu	Met	His	Asn	Leu	Gly	Lys	His	Leu	Asn
1				5					10					15	

Ser	Met	Glu	Arg	Val	Glu	Trp	Leu	Arg	Lys	Lys	Leu
			20					25			

<210> 169
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Preferred embodiments - PTHrP

<220>
 <221> misc_feature
 <222> (28)..(28)
 <223> Optional linker and Fc domain attached at the C-terminus

<400> 169

Leu	Leu	His	Asn	Leu	Gly	Lys	Ser	Ile	Gln	Asp	Leu	Arg	Arg	Arg	Phe
1				5					10					15	

Phe	Leu	His	His	Leu	Ile	Ala	Glu	Ile	His	Thr	Ala
			20					25			

<210> 170
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Preferred embodiments - TIP39

<220>
 <221> misc_feature

A-665B.ST25.txt

<222> (39)..(39)

<223> Optional linker and Fc domain attached at the C-terminus

<400> 170

Ser	Leu	Ala	Leu	Ala	Asp	Asp	Ala	Ala	Phe	Arg	Glu	Arg	Ala	Arg	Leu
1			5						10				15		

Leu	Ala	Ala	Leu	Glu	Arg	Arg	His	Trp	Leu	Asn	Ser	Tyr	Met	His	Lys
			20					25					30		

Leu	Leu	Val	Leu	Asp	Ala	Pro
			35			